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| 10/823,832 | 04/14/2004 | Masatoshi Homan | 17640 | 5643 |

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| EXAMINER |
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KASZTEJNA, MATTHEW JOHN

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| ART UNIT | PAPER NUMBER |
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3739

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09/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/823,832

Applicant(s)

HOMAN ET AL.

Examiner

Matthew J. Kasztejna

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9, 11, 14 and 16 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 12, 13, 15 and 17-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Notice of Amendment

In response to the amendment filed on August 24, 2007, amended claims 23-28 are acknowledged. The finality of the previous office action mailed May 24, 2007 is *withdrawn*. The following new grounds of rejection are set forth:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-5, 17-23 and 26-28 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent Application Publication No. 2003/0028078 to Glukhovsky.

In regards to claims 1, 17-19 and 21-22, Glukhovsky discloses a capsule endoscope apparatus having an illuminating device 23a for irradiating illuminating light in a body cavity, a switching device 45 which switches illuminating conditions of the illuminating light irradiated by the illuminating device (see Fig. 2a), presets at least two different illuminating conditions and a switching order thereof, and automatically switches the illuminating conditions from a first illuminating condition 47 corresponding to a first image acquisition cycle 42 to a second illuminating condition 48 corresponding to a subsequent image acquisition cycle 43 (see Fig. 3); an image pick-up device 24a for sequentially picking up an images of a subject, which is irradiated with illuminating light under the illuminating conditions which are different according to the switching by the switching device; and a radio device 29 which transmits by radio waves image data

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obtained by the image pick-up device upon sequentially switching the two or more light-emitting amount or light-emitting time (see paragraphs 0039-0040, 0058-0066 and 0092-0096).

In regards to claim 2, Glukhovsky discloses a capsule endoscope apparatus wherein the at least two different illuminating conditions are a light-emitting amount or light-emitting time, the capsule endoscope further comprising: a setting device which sets the light-emitting amount or light-emitting time (see Fig. 3).

In regards to claim 3, Glukhovsky discloses a capsule endoscope apparatus, wherein the setting device is a storing device 47 which stores information for setting the light-emitting amount or light-emitting time (see Fig. 3).

In regards to claims 4-5, Glukhovsky discloses a capsule endoscope apparatus wherein the at least two different illuminating conditions are a light-emitting amount or light-emitting time, the illuminating device comprises a white LED (see paragraphs 0075-0078) and wherein the illuminating device comprises an electroluminescence.

In regards to claim 20, Glukhovsky discloses a capsule endoscope apparatus, wherein the illuminating device has a plurality of light-emitting elements at different arranging positions, and the switching device selects the light-emitting element which emits light from the plurality of light emitting element and changes the property of light distribution for the illuminating light (see Figs. 3-4).

In regards to claims 23 and 26-28, Glukhovsky discloses disclose a capsule endoscope apparatus, wherein at least one of the at least two different illuminating

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conditions and the switching order thereof preset by the switching device is set to be changeable by a radio signal (see Fig. 2a).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-8, 10, 12-13, 15 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0028078 to Glukhovsky in view of U.S. Patent Application Publication No. 2003/0117491 to Anvi et al.

In regards to claims 6-7 and 12, Glukhovsky discloses a capsule endoscope apparatus having an illuminating device 23a for irradiating illuminating light in a body cavity, a switching device 45 which switches illuminating conditions of the illuminating light irradiated by the illuminating device (see Fig. 2a), presets at least two different illuminating conditions and a switching order thereof, and automatically switches the illuminating conditions from a first illuminating condition 47 corresponding to a first image acquisition cycle 42 to a second illuminating condition 48 corresponding to a subsequent image acquisition cycle 43 (see Fig. 3); an image pick-up device 24a for sequentially picking up an images of a subject, which is irradiated with illuminating light under the illuminating conditions which are different according to the switching by the switching device; and a radio device 29 which transmits by radio waves image data

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obtained by the image pick-up device upon sequentially switching the two or more light-emitting amount or light-emitting time (see paragraphs 0039-0040 and 0058-0066).

Glukhovsky is silent with respect to a selecting device which extracts an image with a wide dynamic range from two or more pieces of image data obtained by the image pick-up device. Avni et al. teach of an analogous capsule endoscope apparatus having an illuminating device 38 for irradiating illuminating light in a body cavity, a switching device which switches illuminating conditions of the illuminating light irradiated by the illuminating device (see Figs. 6-7), and automatically switches the illuminating conditions from a first illuminating condition 94 corresponding to a first image acquisition cycle (T-T1) to a second illuminating condition 96 corresponding to a subsequent image acquisition cycle (T1-T2); an image pick-up device 32 for sequentially picking up an images of a subject, which is irradiated with illuminating light under the illuminating conditions which are different according to the switching by the switching device (see Fig. 2 and paragraphs 0039-42 and 0074-0076); a selecting device which extracts an image with a wide dynamic range from the two or more pieces of image data obtained by the image pick-up device upon sequentially switching the two or more light-emitting amount or light-emitting time (see Fig. 13 and paragraphs 0152-157); and a radio device 34 which transmits by radio waves the image data obtained by the selecting device (see paragraph 0036). **In regards to claims 8, 10, 13 and 15**, Avni et al. disclose a capsule endoscope apparatus, wherein a luminance distribution of the image data is used as a comparison standard for extracting the image with the wide dynamic range by the selecting device (see paragraphs 0070-0074). It would have been obvious

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to one skilled in the art at the time the invention was made to use a selecting device to extract an image with a wide dynamic range in the apparatus of Glukhovsky to provide higher quality images to the user as taught by Avni et al.

In regards to claims 24-25, Glukhovsky discloses disclose a capsule endoscope apparatus, wherein at least one of the at least two different illuminating conditions and the switching order thereof preset by the switching device is set to be changeable by a radio signal (see Fig. 2a).

Allowable Subject Matter

Claims 9, 11, 14 and 16 are allowed.

Response to Arguments

Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Kasztejna whose telephone number is (571) 272-6086. The examiner can normally be reached on Mon-Fri, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJK 

9/10/7



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